

Appl. No. 10/693,353  
Amdt. Dated Apr. 1, 2005  
Reply to Office Action of Mar. 8, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1-12 (cancel)

Claim 13 (currently amended): A drop test apparatus for determining the resiliency of playing surfaces comprising:

a missile for impacting said surface;

a guide including a tube and a base for providing substantially unrestricted free flight of said missile prior to impacting said surface;

said base having radially extending grooves about its lower surface, said grooves acting to vent air from said tube during flight of said missile;

a pair of accelerometers carried by said missile for producing signals in response to impact of said missile with said surface;

a converter adapted to receive said accelerometer signals, convert said signals and transmit said converted signals to a storage and display unit; and

said storage and display unit storing and displaying said converted signals.

Claim 14 (original): The drop test apparatus of claim 13 wherein said guide tube comprises a plastic tube having slots along its length and about its periphery so as to provide unrestricted flight for said missile.

Appl. No. 10/693,353  
Amdt. Dated Apr. 1, 2005  
Reply to Office Action of Mar. 8, 2005

Claim 15 (original): The drop test apparatus of claim 13 wherein said missile includes a recess in its upper surface, said accelerometers being mounted within said recess.

Claim 16 (original): The drop test apparatus of claim 13 wherein said storage and display device is a computer.

Claim 17 (original): The drop test apparatus of claim 13 wherein said signals are recorded and displayed in the form of a graph.

Claim 18 (currently amended): A drop test apparatus for testing the resiliency of playing surfaces comprising:

a guide including an elongate tube for positioning a missile a prescribed distance above a playing surface and for guiding said missile during free fall onto said surface;

said missile having a body having a bearing arranged about its circumference separating said missile from said tube;

said missile including ~~a body and~~ an accelerometer, said accelerometer being operative to activate upon impact with said surface to produce signals in response to said impact;

a wireless communicator adapted to receive said signals produced by said accelerometer and to convert and transmit said converted signals to a storage and display device, said storage and display device producing a display in response to said converted signals, whereby;

Appl. No. 10/693,353  
Amdt. Dated Apr. 1, 2005  
Reply to Office Action of Mar. 8, 2005

resiliency of said playing surface is provided.

Claim 19 (original): The drop test apparatus of claim 18 wherein said accelerometer comprises first and second accelerometers, said first accelerometer acting to activate said second accelerometer upon impact of said missile, said second accelerometer producing said signal delivered to and converted by said wireless communicator.

Claim 20 (original): The drop test apparatus of claim 18 wherein said accelerometer communicates with said wireless communicator by way of a transmission wire.

Claim 21 (original): The drop test apparatus of claim 18 wherein said missile includes a cavity formed in its upper surface, said cavity mounting said accelerometer beneath said upper surface.

Claim 22 (original): The drop test apparatus of claim 21 wherein said cavity includes a threaded bore, said accelerometer being mounted in said threaded bore.

Claim 23 (currently amended): The drop test apparatus of claim 18 ~~including an elongate tube surrounding said missile and guiding said missile during free fall, wherein~~ said tube ~~including~~ includes a plurality of slits about its periphery for promoting unrestricted free fall.

Claim 24 (currently amended): The drop test apparatus of claim ~~23~~ 18 wherein said guide includes a base with radially extending grooves arranged about its lower surface, said grooves acting to vent air from said tube during free flight of said missile through said tube.

Appl. No. 10/693,353  
Amdt. Dated Apr. 1, 2005  
Reply to Office Action of Mar. 8, 2005

Claim 25 (cancel)

Claim 26 (currently amended): The drop test apparatus of claim 23 18 wherein said bearing comprises at least a pair of synthetic rings.

Claim 27 (previously presented): The drop test apparatus of claim 23 including a locking device operative to lock said missile in a stationary position within said tube for transport.

Claim 28 (previously presented): The drop test apparatus of claim 23 wherein said tube is formed of synthetic material.

Claim 29 (previously presented): The drop test apparatus of claim 23 including a guide tube extension connectable with said second end for extending the length of said guide tube.

Claim 30 (previously presented): The drop test apparatus of claim 18 wherein said missile includes a plurality of vertical vents arranged adjacent its periphery.

Claim 31 (previously presented): The drop test apparatus of claim 18 wherein said guide includes a guide tube with open upper and lower ends, a centering handle arranged above said upper end and first means pivotally mounting said centering handle at one end and second means releasably connecting said centering handle at a second end with said guide whereby said centering handle may be pivoted about said first means to allow entry into said guide through said upper end.